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Pentagon Renovation Office

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Basement betterment begins

Basement renovation kicks off in October

Pentagon tenants adjacent to the basement may have noticed an increase in noise level, debris and dust due to construction activities. Much of the construction work can be attributed to the renovation of the basement which began on Oct.17.

Renovation location

This work marks the beginning of the interior renovation of the Pentagon. The George Hyman Construction Co., of Bethesda, Md., is the contractor. Current construction is in the space formerly occupied by the Navy Print Plant and some Air Force administrative activities (see illustration pg. 2).

While debris, noise and dust cannot be completely eliminated from the area while construction is underway, the U.S. Army Corps of Engineers, Baltimore District, Pentagon Renovation Office, which is responsible for all site coordination and contractor activities, has attempted to eliminate as many construction inconveniences as possible.

Site preparation

Initially, asbestos abatement must be performed. Before any construction begins in an area, the asbestos must be removed. This is accomplished by containing the area and restricting it to authorized personnel only. Workers must wear protective clothing and perform air monitoring on a regular basis. Asbestos was originally used in various materials, such as insulation, ceiling plaster and floor tiles.

The next step of the renovation is demolition of the interior. Chris Sarver, Corps project manager for the basement renovation said, "Essentially we are gutting the interior." Only the structural supports will remain.

New floor

Following demolition of the interior, the old floor slab must be removed so a new floor and a subdrainage system can be installed. The new floor will be roughly two feet lower than the current floor. After the slab is removed, excavation of some soil will be necessary to install underfloor utilities. "By lowering the basement floor we can raise the basement and mezzanine levels. Raised floors are necessary when a large amount of Automatic Data Processing equipment is used in an area," said Sarver.

Pile driving

Piles must be driven into the ground, tied with reinforcing steel, then filled with concrete. "The new basement floor will be structurally supported (piles) compared to the original slab on grade," said Ed Mullins, on-site project engineer. Piles are needed to ensure the new floor does not sink. The Corps has arranged for most of the pile driving to be performed during the night shift as part of its efforts to reduce the noise level during daytime work hours.

Office space

New flooring will be placed and new partition walls and corridors positioned, creating new space. New plumbing, heating, cooling lines and communication conduits also will be installed.

Much like the basement, mezzanine offices were created ad hoc, on a level that was originally built to house utilities. The new mezzanine will cover most of the basement area.

The plan is to locate all of the military command centers in newly renovated space. This will be achieved upon completion of the entire basement construction program.

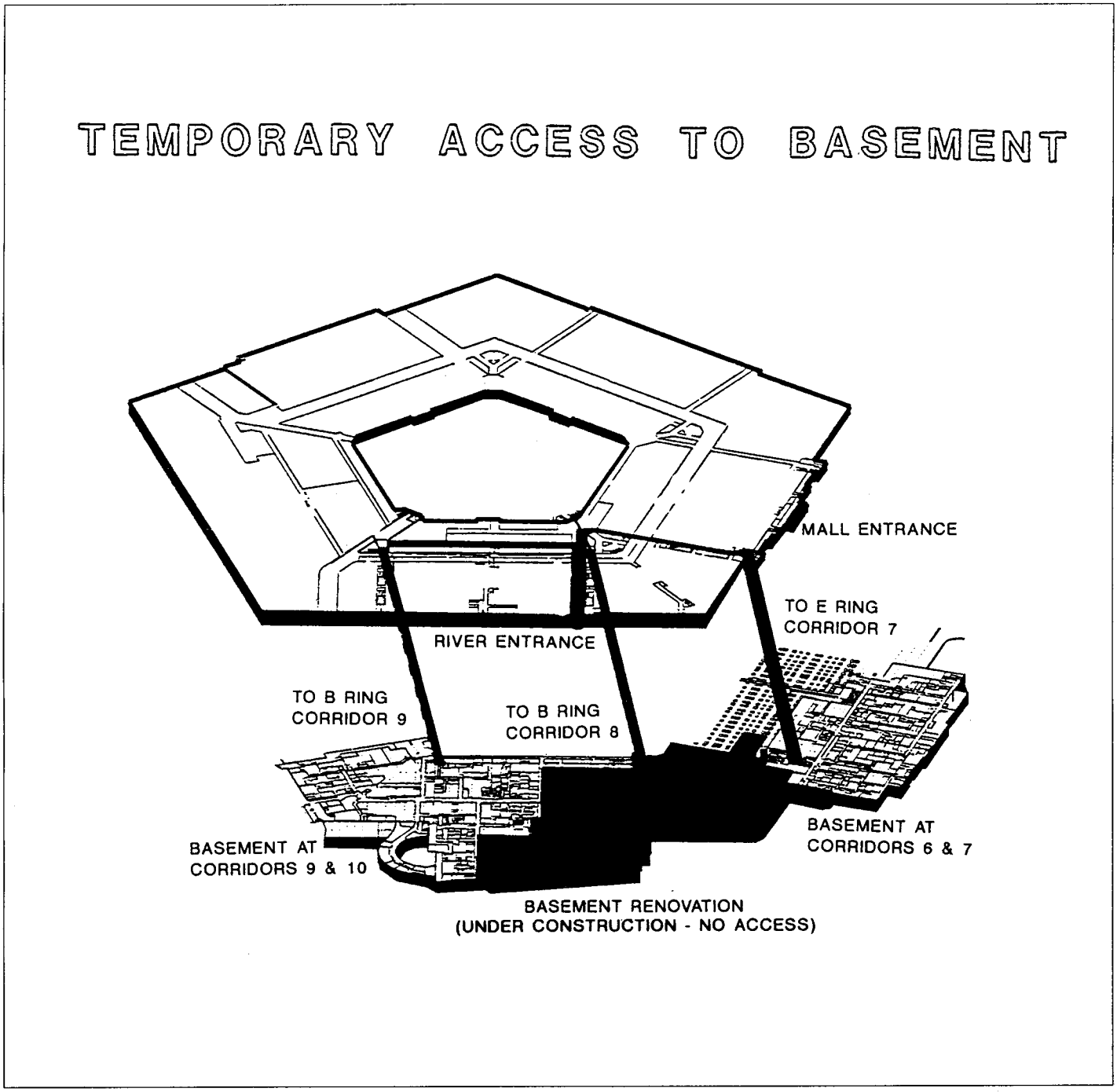
Access routes

During construction, some access routes to the basement may be obstructed. Signs indicating open stairwells to the basement will be posted to help direct tenants to operational basement offices.

Comments concerning Corps construction

Pentagon tenants and the organizations responsible for the basement renovation face a difficult challenge: performing construction work while tenants remain in the area. While inconveniences are a normal occurrence around any construction area, there may be times that problems or more immediate concerns such as safety hazards may arise.

Questions or comments concerning construction aspects of the renovation can be addressed to the U.S. Army Corps of Engineers, Baltimore District, Pentagon Renovation Office's Public Affairs, (703) 693-8938, FAX (703)-697-6722. The office is located in the North Parking Lot, 100 Boundary Channel Dr.



The Pentagon basement is shown in relation to access from the upper floors. Similar signs are posted in the Pentagon near stairwells to assist tenants in locating operational basement offices.

Asbestos abatement: safe, effective

For many individuals, the presence of asbestos and its removal may cause some anxiety. However, asbestos can be removed in a safe, effective manner that poses no risk to those outside of the contained removal area.

Asbestos materials

Many older buildings, like the Pentagon, used asbestos-containing materials because they were relatively inexpensive but functional materials.

Asbestos is an incombustible, chemical resistant, naturally occurring, fibrous mineral form of impure magnesium silicate (which has no odor), used for fireproofing, electrical insulation and building materials.

While undisturbed asbestos poses no health risks, if asbestos-containing materials are broken down, asbestos fibers can pose a health risk. Therefore, the proper safety precautions must be taken when asbestos-containing materials are removed.

Regulations

The Corps' contractor for asbestos removal in the basement, ACECO, of Silver Spring, Md., is following guidelines and requirements for removal, encapsulation, encasement, and enclosure of asbestos-containing materials in compliance with the Occupational Safety and Health Administration, U.S. Environmental Protection Agency, Virginia, and local regulations.

Tenant safety is the top priority of the asbestos abatement program. Safe practices begin by protecting tenants from exposure to the work area.

Entry into the asbestos regulated work area is limited to authorized personnel. Twenty-four hour security is provided to guarantee only those authorized personnel are allowed into the designated removal area.

Containment

The area designated for asbestos removal is controlled by isolating the work within a containment enclosure. The floors and walls are covered with at least two layers of polyethelene film.

Heating, ventilating and air conditioning systems are shut down. Openings to the systems are capped, and temporary systems are provided in the asbestos removal work area to ensure that contaminated air is not distributed throughout the building through the ventilation system.

Air Monitoring

A High-Efficiency Particulate Air Filter (HEPA) is used to trap and retain airborne particles.

According to Jim Hollingshead, senior environmental scientist with URS Consultants, a consulting firm monitoring the asbestos removal, "Negative air pressure is created within the containment area using high efficiency filters which remove 99.97 percent of the asbestos from the air before it is exhausted to the outside."

Air monitoring equipment is used to take air samples in both the containment and adjacent areas. Air is also sampled after the final cleanup to ensure that asbestos levels are below federal guidelines.

Removal

Asbestos-containing materials are sprayed with water to further reduce the creation of dust and debris during removal.

"Most types of asbestos are porous and readily absorb water. Thus, the asbestos fibers are less likely to remain airborne," said Winson Cumberland, industrial hygiene technician for Applied Environmental, Inc., an environmental consulting firm contracted by the Corps.

Surfaces from which asbestos-containing materials are removed are also wiped clean. All equipment used in the work area is decontaminated prior to removal from asbestos regulated work areas. Vacuums and water filtration equipment are used to collect the waste material.

Disposal

All asbestos waste, asbestos contaminated water, scrap, debris, bags, containers, equipment and asbestos contaminated clothing are placed in sealed, leak-tight containers for hauling and disposal. The contractor then ships the material to the EPA approved waste disposal location.

The asbestos abatement plan for the basement renovation provides a safe working environment for tenants while affording an effective means of asbestos removal.

Other renovations continue

New steam line to FOB-2 commissioned

Just in time for the cold weather, the new steam line to Federal Office Building-2 (the Navy Annex) and Henderson Hall was commissioned Nov 28. The U.S. Army Corps of Engineers, Baltimore District, responsible for construction aspects of the Pentagon renovation, awarded the steam line construction contract to Jones & Wood, Inc., with financing provided by Washington Headquarters Service, the organization responsible for managing the entire Pentagon renovation program.

Representatives of the Corps, Washington Headquarters Service Pentagon Planning and Renovation Office, the Heating and Refrigeration Plant, Jones & Wood, Inc., and Henderson Hall performed the commissioning ceremony in the basement of Federal Office Building-2.

The new steam line supplies steam heat to Federal Office Building-2 and the Marine Corps' Henderson Hall facility. The existing steam line had deteriorated almost beyond repair so it was prudent to install a new line.

Corps Pentagon Renovation Office employees joined other agency representatives in commissioning the new steam line that distributes heat steam to Federal Office Building-2 and Henderson Hall. Participants are from left, Don Kuney, Dave Westrick, Georgine Glatz, Bob Wilson, Maj. Jack McAteer, Tony Wood and Col. R. A. Cote Jr.

"Despite weather delays and differing site conditions, construction was completed on schedule due to the diligence of the contractor, Jones & Wood, Inc.," said Westrick.

According to Kuney, the line provides "a more efficient means of heat distribution which means greater savings in energy costs."

Steam is produced at the Pentagon Heating and Refrigeration Plant, piped to the steam vault located adjacent to the Pentagon Heliport, and then brought through the new steam line to Federal Office Building-2 and Henderson Hall.

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